Briefing Notes 3-29-07

Preliminary Analytical Results: 03/29/2007
Well water sampling - Enterprise Recovery Systems (ERS) Site, Byhalia MS
February 12-16, 2007

Lat week Brian Striggow at SESD forwarded the preliminary lab results. I've been advised today that the results are now "completed" in the QA/QC process.

Figure 1 (next page) shows the locations of the four wells with detections, as well as all wells sampled.

Results

Well (SESD designation)	Detections (ug/L)	Notes
ER-21 Joe Watkins	*TCE 41 (MCL=5)* Cis-1,2-DCE 17 (MCL=70) 1,1-DCE 6.6 (MCL=7) 1,1,1-TCA 3.2 (MCL=200) 1,1-DCA 1.4 (no MCL) PCE 0.44 (MCL=5) Benzene 0.25 (MCL=5)	**Well is not used for any purpose;** for our sampling, local well driller pulled well internals then replaced after sample. TCE is >MCL. This well was the highest (358 ug/L) in 1993-1994 sampling events.
ER-01D (dup of ER-01) Bolden, Greg	TCE 0.33 (MCL=5)	**Well is used for non-potable uses** – outside watering and washing. Three homes share this well. Hit is <MCL.
ER-12 Davis, William	Vinyl Chloride 0.25 (MCL=2)	** **Well is used for drinking water.** Mr. Davis is an older gentleman who is not there all of the time, however, acc. to son Bill Davis Jr., with whom the arrangements to sample were made.
ER-13 -13D Lee, Samuel	Freon-12 3.5 (No MCL) Freon-12 6.6 (No MCL)	**Well is not used for any purpose;** for our sampling, local well driller pulled well internals then replaced after sample.

HRS Significance of Findings

Using Quickscore and relying on HRS information gathered by our START Contractor (TN&A) in the 2006 Reassessment, I had calculated prior to sampling (back in January) that **if we found ~~seven~~ eight (~~7~~ 8) homes/wells serving ~~eighteen (18)~~ 21 people** where we had >MCL (Level I in HRS) detections,

this would elevate the HRS figure to above 28.5, assuming (as is reasonable) that the other information TN&A developed for the re-score, was correct. This is conservative in that the number of wells in the area has likely increased since the Reassessment data was collected in 2005.

However, even using (counting) the two residences RCRA had connected to the Marshall County water supply in 2005, we can only add now, from this sampling event, one well (ER-12, Davis) and only as a Level II hit. (In adding up targets, its value is 1/10 that of an above-MCL well.) One other impacted well (ER-01, Bolden) is used for washing etc. and could in theory be used ("standby") if county water became unavailable; but even so, and even counting it fully as a fourth (4^{th}) well, it is still Level II and still will not be enough to make the site score > 28.5.

Recommended short term strategy

I have briefed MDEQ (Richard Ball) on the findings and provided the data. Mr. Davis will be contacted today about the below-MCL detection of vinyl chloride. Letter will be prepared for the other three well owners where there was a detection; and a flyer for distribution to all other well owners where there was no detection made. I will plan to make arrangements with Linda Starks (Comm. Involvement) for an availability session for residents, probably at the nearby Baptist church on Cayce Road (<1000 feet north of ERS).

Longer term strategy

Mississippi may feel that a response of some kind is required, but these detections don't justify very much in that regard. It is true that seven (7) of the sampled wells are still being used for potable water supply. Institutional controls of one kind or another may hold more promise as a way to prevent future exposures.

Finally, in response to these results and perhaps as a way to gain further interest from us, my staff counterpart in their assessment staff (Richard Ball) has raised the issue of "should we have sampled for dioxins?" I'll look into this, but I'm doubtful that this represents any sort of oversight on our part. It isn't routine in sampling for suspected chlorinated solvents, and I'm unaware of what special factors here would call for it. Past EPA and MDEQ sampling on and around the site has *not included dioxins.

FIGURE 1. Wells sampled in red; stripe means DW source. Groundwater flow direction is to the upper left (NW).